

**REMARKS**

This Amendment is submitted in response to the Office Action mailed January 31, 2005, wherein the Examiner rejected many of the claims, but did indicate that claims 28, 29 and 30-35 would be allowable if rewritten in independent form and to otherwise overcome the objections under 35 U.S.C. Sec. 112 noted in the Action. This indication of allowable subject matter is noted with appreciation. Reconsideration of the application in view of the Amendments made herein is respectfully requested.

**The Drawings**

In the Office Action, the Examiner objected to the drawings, stating that the drawings did not show every feature of the invention as specified in the claims. Specific mention was made to those claim limitations regarding the "spring being mounted on a platform movable with respect to the base" and the showing of "a spring", also recited in the claims.

Applicant respectfully submits herein corrected Figs. 5 and 6 and new Fig. 9, which overcome these drawing objections.

More specifically, Fig. 5 and Fig. 6 now show the motive assembly as being mounted on base 2. This base is also shown in the original drawings, in Fig. 2. These corrected drawings show how platform 6 moves with respect to base 2, that is, by showing the movement of the platform 6 which travels within

slots 25. This movement was previously seen with respect to bolts 9 (in the drawings prior to correction), and is now readily seen with respect to base 2.

Fig. 9 has been newly added. This figure is substantially identical to that of Fig. 2, except the spring 34s is shown.

No new matter has been inserted in the submitted drawing, and acceptance of these figures is respectfully requested.

### **The Sec. 112 Rejection**

In the Office Action, the Examiner rejected claims 5-13 and 15-24, as failing to particularly point out and distinctly claim the invention. The Examiner indicated that it was unclear how both ends of the spring are capable of moving relative to the base or what such an arrangement performs or provides. The rejection continued by indicating that the drawings do not show how the spring, in the form of a gas filled strut, would have 2 ends movable relative to base plate 2. Finally, claim 7 was rejected as being unclear as to whether the spring is movable with respect to the base, or whether the platform is movable with respect to the base.

The specification, at page 10, line 29 through page 11, line 18, provides details of how the two ends of spring 34 are attached to the rest of the mechanism. Specifically, one spring end is connected to shaft 1 (at lug 41 and clevis 42) and the other end of the spring is connected to slide or platform 6 (at clevis 43). If the platform is locked, rotation of the shaft moves the shaft connected end of the spring; if the shaft is stationary, as the platform moves, it

carries with it the other end of the spring, as that end is connected to, and moves with, the platform. Neither end of the spring is anchored to the base.

The specification continues, at page 12, lines 2-5, to note that movement of shaft 1 in a counter-clockwise direction will cause spring 34 to compress, due to the relative motion of clevis 42 and clevis 43, which will move toward each other.

Such an arrangement provides a significant advantage, because movement from the Horizontal barrier position to the Ramp barrier position is only in the order of 10 degrees. If the end of spring 34 at clevis 43 were affixed to the base, as shaft 1 turns (as a vehicle goes over it), the spring would not be sufficiently energized to subsequently raise the barrier from the Ramp barrier position to the Vertical barrier position, as the spring would be compressed by only the movement of the spring end attached to lug 41, proportional to the movement of shaft 1. Thus, while movement of shaft 1 results in some movement of the end of the spring that is attached to the shaft at lug 41, the end of spring 34 at clevis 43 moves considerable more towards shaft 1. By allowing the other end of the spring to move (via platform 6), the spring is compressed to a greater degree and such compression provides greater energy to raise the barrier. It is therefore the combined movement of both ends of spring 34 that causes the spring to fully compress during the relatively small angular rotation of shaft 1.

### **The Prior Art Rejections**

The following references are the ones primarily relied upon in the Office Action:

**Hartwig, 4,875,797**

Hartwig '797 discloses a barrier which is manually locked in an up or down position using a pin that is jammed into the barrier, locking the barrier to the base plate. Springs are provided, but these function to prevent vandalism. Hartwig does not disclose a barrier having a Horizontal position, a Ramp position and a Vertical position, with a vehicle passing over the barrier to move it from the Horizontal position to the Ramp position. Moreover, the springs in Hartwig do not function on demand to raise the barrier from one locked position to another.

**Boswell 6,619,629**

Boswell '629 discloses a flexible guard rail, which generally is used to delineate the width of parking spaces. The guard rail allows only 40 degree movement from the vertical, and if outside that range, the rail is raised manually. The specification notes that the guide rail acts as a warning when the driver hits it, thereby alerting the driver to his misjudgment.

As with Hartwig, Boswell does not disclose a barrier having a Horizontal position, a Ramp position and a Vertical position, with a vehicle passing over the barrier to move it from the Horizontal position to the Ramp position. Nor does Boswell disclose the use of a spring (or any other mechanism for that matter), which is energized as the vehicle moves over the barrier, thereby

enabling the barrier to be raised from a Ramp position to a Vertical position on demand.

**Wagner 6,398,492**

Wagner '492 is discussed, in detail, in the specification as filed. As indicated therein, Wagner utilizes a separate barrier and a separate pedal, both movable around horizontal shafts but having different degrees of angular rotation allowed for each. Thus, Wagner does not disclose a barrier which has three separate positions, and where the barrier itself energizes the spring that enables the barrier to eventually move to its blocking state, as a vehicle goes over the barrier.

**The Claim Amendments**

Applicants have cancelled claims 2-8 and 41-45 and have amended claims 1, 9-10, 20, 25 and 36. Thus, the claims presently presented in the application are claims 1 and 9-40.

Applicants have amended their claims to respond to the Office Action rejections, based on Section 112 grounds and also based on Section 102 and Section 103 grounds.

More particularly, the independent apparatus claims have been amended to recite that the invention includes a spring having a first spring end and a second spring end, that the first spring end is operatively connected to the shaft that raises or lowers the barrier, that the second spring end is operatively

connected to a support movable on a base, and that as the barrier moves from its first or horizontal position to its second or ramp position, the second spring end moves with the support to energize the spring sufficiently so that when the barrier is released, it can move from its second or ramp position to its third or vertical position.

Similarly, independent method claim has also been amended to recite that as the spring that is energized has a first end and a second end, and that sufficient energy is provided to the spring by having the second spring end move relative to the first spring end, with the second spring end also movable with respect to the barrier's base.

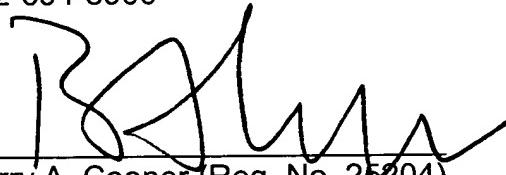
None of the art, either alone nor in combination, teaches or discloses the above features. For example, to the extent that Hartwig '797 discloses a spring that even assists in moving the barrier, the spring is welded at both ends to the leg portions (col. 2, lines 28 – 31); Boswell '629 does not disclose any spring; and the torsion spring in Wagner '452 (discussed at col. 9, lines 45-63) does not have two spring ends, one of which is connected to the shaft moving the barrier and the other of which is connected to a separate movable support that moves relative to the base so as to provide additional energy to the spring. Indeed, in Wagner, leg 82 of the torsion spring 78 "rests on the chassis or framework .. or on the ground or substrate on which device 2 is supported or is held captive by suitable means." [Emphasis added.] Thus, there is no doubt that in Wagner this end of the spring does not move.

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In view of the foregoing, Applicants submit that all claims presently in the application, namely, claims 1 and 9-40, should be allowed and such action is respectfully requested.

Respectfully submitted,

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**AMENDMENTS TO THE DRAWINGS**

The attached two amended replacement drawing sheets, which contain Figs. 5 and 6, and a new drawing sheet, which contains Fig. 9. These drawing sheets are submitted to comply with the requirements of 37 C.F.R. 1.121(d), and to bring the originally submitted drawings into conformity with the claims of the application.

**Attachment:** Three (3) drawing sheets (Figs. 5,6 and 9).